



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,713	03/08/2004	Yuko Miyake	2309.69966	2878

7590 01/24/2006

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
300 South Wacker Dr., Suite 2500  
Chicago, IL 60606

EXAMINER
----------

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
----------	--------------

1773

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/796,713

Applicant(s)

MIYAKE ET AL.

Examiner

Kevin M. Bernatz

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Response to Amendment***

1. Amendments to claim 1 and cancellation of claims 14 - 17, filed on November 14, 2005, have been entered in the above-identified application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Drawings***

3. The replacement drawings filed November 14, 2005 are acceptable.

### ***Claim Rejections - 35 USC § 102***

4. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Osaka et al. (U.S. Patent No. 6,120,918) as evidenced by Yoshikawa et al. (U.S. Patent No. 6,132,892) for the reasons of record as set forth in Paragraph No. 6 of the Office Action mailed on August 9, 2005.

The Examiner notes that the amended subject matter of claim 1 was previously taught per the limitations in claim 5.

5. Claim 13 is rejected under 35 U.S.C. 102(a) and/or (b) as being anticipated by Kawasaki et al. (U.S. Patent App. No. 2002/0132137 A1) for the reasons of record as set forth in Paragraph No. 7 of the Office Action mailed on August 9, 2005 – **and -**

6. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Kawasaki et al. (U.S. Patent No. 6,765,757 B2 for the reasons of record as set forth in Paragraph No. 6 of the Office Action mailed on August 9, 2005.

***Claim Rejections - 35 USC § 103***

7. Claims 1 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. as applied above, and further in view of Osaka et al. ('918) and Yoshikawa et al. ('892) for the reasons of record as set forth in Paragraph No. 11 of the Office Action mailed on August 9, 2005.

The Examiner notes that amended claim 1 simply incorporates the subject matter of claim 5, which is met for the reasons of record stated in Paragraph No. 11 of the Office Action mailed on August 9, 2005.

8. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. in view of Osaka et al. and Yoshikawa et al. as applied above, and further in view of Sano et al. (U.S. Patent No. 6,661,606 B2).

Kawasaki et al., Osaka et al. and Yoshikawa et al. are relied upon as described above.

While Kawasaki et al. appears to inherently disclose alloys meeting a minimum hard axis coercivity, none of the above explicitly disclose that it is the hard axis coercivity being limited.

However, Sano et al. teach that for magnetic films used in magnetic heads, it is the combination of high saturation magnetization (as also taught by Kawasaki et al.) and low coercivity in the hard axis direction that results in good soft magnetic performance for materials when used in magnetic head applications (*Figures 10, 17C and 18C; and col. 2, lines 32 – 63*).

It would therefore have been obvious to one of ordinary skill in the art at the time of applicants' invention to modify the device of Kawasaki et al. to insure that the coercivity in the hard axis is minimized as shown in Kawasaki et al. Figure 10 as taught by Sano et al., since Sano et al. teach that it is the combination of high saturation magnetization and low coercivity in the hard axis direction that results in good soft magnetic performance for materials when used in magnetic head applications.

### ***Response to Arguments***

**9. The rejection of claims 1, 3, 5 and 6 under 35 U.S.C § 102(b) – Osaka et al.**

Applicant(s) argue(s) that Osaka et al. fail to disclose a plated FeCo film, only disclosing a Co-Fe-Ni film (*pages 6 and 7 of response*). The examiner respectfully disagrees.

The Examiner notes that applicants' claims are open to additional elements being present, as well as additional layers being present. Should applicants' desire to exclude additional layers from being present between the various layers, they are recommended to positively recite that the layers are directly adjacent to each other. Furthermore,

should applicants desire to exclude additional elements from being in the FeCo layer, they are suggested to use the language  $\text{Fe}_x\text{Co}_{1-x}$ , as in claim 3.

**10. The rejection of claims 1 – 6 and 13 under 35 U.S.C § 102(a), (b) and/or (e) and/or 103(a) – Kawasaki et al., alone or in view of various references**

Applicant(s) argue(s) substantially in the same manner as with the Osaka et al. reference, that the *structure* of Kawasaki et al. is different than applicants' structure (*pages 7 – 8 of response*). The examiner respectfully disagrees.

Applicants are reminded that the specification is not the measure of the invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968). The present claims are open to additional layers being present and applicants should consider positively reciting that the various layers are "directly adjacent" to each other if they wish to exclude additional layers.

***Conclusion***

11. Applicant's amendment (i.e. the incorporation of some of the subject matter of claim 5 into claim 1) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

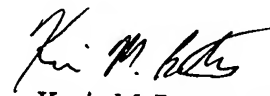
Art Unit: 1773

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M Bernatz whose telephone number is (571) 272-1505. The examiner can normally be reached on M-F, 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kevin M. Bernatz, PhD  
Primary Examiner

KMB  
January 17, 2006